

Appendix 1C

Waters of the U.S. in Project Study Area

Feature ID#	Feature Type ¹	Area (acres) ²	Description	Data Points
Segment 1 (MP 0.0-MP 6.1)				
0.30	FM	3.29	Walnut Creek and Grayson Creek channels	
0.50	NJW	0.08	small 1' wide drainage ditch excavated in uplands	
0.56	NJW	0.01	seasonally ponded depression (isolated)	x
0.57	NJW	0.05	ponded area between road & RR tracks (isolated)	
0.76	SAM	0.46	seasonally ponded depression	
0.82	SM	0.45	alum sludge drying pond	
0.83	BM	1.26	seasonally ponded depression	
0.88	SM	0.44	alum sludge drying pond	
0.98	SM	0.53	seasonally ponded depression	
1.04	SM	0.40	seasonally ponded depression	
1.05	FM	0.10	seasonally ponded depression	
1.08	SM	0.06	seasonally ponded depression	
1.10	WUS	0.19	drainage ditch	
1.11	WUS	0.07	drainage ditch	
1.44	SAM	0.48	seasonally ponded depression	
1.47	SAM	0.28	marsh area adjacent to Pacheco Slough	
1.48	SAM	0.10	marsh area adjacent to Pacheco Slough	
1.50	SAM	1.93	seasonally ponded depression	x
1.54	WUS	0.14	drainage ditch	
1.60	WUS	0.11	Pacheco Slough east of alignment	
1.61	WUS	0.04	Pacheco Slough west of alignment	
1.62	SAM	1.32	seasonally ponded depression	
2.63	WUS	0.08	drainage ditch	
2.64	FM	0.98	seasonally ponded depression	
2.83	SM	0.25	seasonally ponded depression	
3.10	SAM	0.21	seasonally ponded depression	
3.14	SAM	0.52	seasonally ponded depression	
3.67A	SAM	3.72	diked former tidal marsh	
3.67B	SAM	3.76	diked former tidal marsh	x
4.08	WUS	0.47	Peyton Slough channel above tide gate	
4.10	SAM	0.60	seasonally ponded depression	
4.18	WUS	1.14	ponded depression	
4.19	WUS	1.53	Peyton Slough channel above tide gate	
4.51	NJW	0.05	ponded depression excavated in uplands	
4.54	WUS	0.15	Peyton Slough channel below tide gate	
4.55	NJW	0.16	ponded depression excavated in uplands	
4.66	WUS	0.01	ponded depression	
4.69	NJW	1.22	ponded depression excavated in uplands	
4.90	BM	0.14	southern margin of Carquinez Strait	
5.00	BM	0.18	southern margin of Carquinez Strait	
5.02	WUS	26.49	Carquinez Strait open water (navigable)	
Segment 2 (MP 6.1-MP 17.6)				
6.13	BM	0.38	northern margin of Carquinez Strait	x
6.27	BM	2.50	brackish marsh along margin of Carquinez Strait	
6.96	BM	3.44	Sulphur Springs Ck. And BM adj. To Carquinez Strait	
7.36	SAM	0.05	channel outlet from feature 7.37A/B/C (WC#5A)	

SFPP Concord-Sacramento Pipeline
APPENDIX 1C. WATERS OF THE U.S. IN PROJECT STUDY AREA

Feature ID#	Feature Type ¹	Area (acres) ²	Description	Data Points
7.37A	SAM	0.38	seasonally ponded depression	
7.37B	SAM	0.13	seasonally ponded depression	
7.37C	SAM	0.23	seasonally ponded depression	
9.13	WUS	0.00	ephemeral creek	
9.87	WUS	0.01	ephemeral creek	
10.57	FM	0.03	ephemeral creek w/freshwater marsh	x
10.69	SM	0.06	seasonally ponded depression	
10.73	SM	0.11	seasonally ponded depression	
11.23	WUS	0.01	ephemeral creek	
11.33	WUS	0.02	ephemeral creek runs to culvert under road	
11.71	WUS	0.02	ephemeral creek runs through culvert under road	
12.15	WUS	0.02	ephemeral creek runs through culvert under road	
12.31	SM	0.62	seasonally ponded depression	x
13.07	SM	0.10	seasonally ponded depression	
13.34	WUS	0.01	ephemeral stream channel	
13.37	SM	0.02	seasonally ponded depression	
13.41	SM	0.03	seasonally ponded depression	
13.46	SM	0.04	seasonally ponded depression	
13.54	SM	0.09	seasonally ponded depression	
13.56	SS	0.05	seasonal seep adjacent to ephemeral drainage	x
13.78 A	WUS	0.01	ephemeral creek runs through culvert under road	
13.78 B	SS	0.03	seasonal seep adjacent to ephemeral drainage	
13.91	SM	0.03	seasonally ponded depression	
13.94	WUS	0.01	ephemeral creek runs through culvert under road	
14.23	WUS	0.02	ephemeral creek runs through culvert under road	
14.41A	SAM	0.06	seasonally ponded depression btwn Lopes Rd and I-680	x
14.41B	SAM	0.14	seasonally ponded depression btwn Lopes Rd and I-680	
14.41C	SAM	0.28	seasonally ponded depression btwn Lopes Rd and I-680	
14.45	SS	0.18	seasonal seep within a natural swale	
15.54	WUS	0.03	box culvert conveys "Old Paseo Creek"	
15.62	NJW	0.02	seasonally ponded depression at culvert opening (isolated)	
15.79	NJW	0.01	seasonally ponded depression at culvert opening (isolated)	
15.94	WUS	0.07	trapezoidal 10' channel out of box culvert	
16.32	SM	0.11	seasonally ponded drainage ditch connects to waters U.S.	
16.55	WUS	0.09	channel out of 2 box culverts	
16.79	SM	0.70	seasonally ponded depression	
16.80	SM	0.19	seasonally ponded drainage channel adjacent to Ramsey Road	
16.86	WUS	0.01	drainage ditch	
17.08	WUS	0.05	stream channel	
17.09	FM	0.01	freshwater marsh in channel	
17.44	RF	0.55	stream with riparian canopy	
Segment 3 (MP 17.6-MP 24.5)				
18.13	SAM	1.59	seasonally ponded depression on alkali soils	
18.70	WUS	0.10	channel of American Canyon Creek (seasonal)	
19.10	SAM	2.65	diked marsh adjacent to Cordelia Slough	
19.23	WUS	0.24	Cordelia Slough channel	
19.24	SAM	2.86	north of pipeline route – diked managed marsh	
19.25	SAM	2.55	south of pipeline route – diked managed marsh	
19.48A	WUS	0.02	abandoned meander channel	
19.48B	WUS	0.26	abandoned meander channel	
19.52A	SAM	1.98	diked marsh north of pipeline route	
19.52B	SAM	0.63	diked marsh south of pipeline route	
19.52C	SAM	0.39	diked marsh south of pipeline route	
20.27	WUS	0.05	bed and bank of seasonal stream	

Feature ID#	Feature Type ¹	Area (acres) ²	Description	Data Points
20.50	RF	0.77	Suisun Creek, stream with riparian canopy	
20.68	WUS	0.15	drainage ditch	
21.71	WUS	0.12	drainage ditch	
22.86	SM	0.09	seasonally ponded depression	
22.90	WUS	0.03	WC # 17B (original) not crossed by current alignment	
22.93	NJW	0.18	seasonally ponded depression, no VP flora (isolated)	x
23.19	SM	0.23	seasonally ponded depression, no VP flora	
23.25	SM	0.04	seasonally ponded depression, no VP flora	
23.26	BM	0.83	WC #18 – Ledgewood Creek BM in channel	
23.31	SM	0.06	seasonally ponded depression	
23.60	SM	0.04	seasonally ponded depression – WC – 18A	
23.61	SAM	0.45	seasonally ponded depression between Cordelia Rd. and RR	
23.63	SM	0.03	seasonally ponded depression (GPS 23-7B)	
23.64	SAM	0.79	seasonally ponded depression	
23.74A	WUS	0.15	Peytonia Slough channel – WC #19	
23.74B	WUS	1.17	Peytonia Slough channel above Cordelia Road	
23.75	SM	0.04	seasonally ponded depression	
23.77	SAM	0.14	borrow area between Cordelia Rd and RR embankment	
23.78	BM	0.53	borrow area adjacent to RR embankment	
23.80	SM	0.06	seasonally ponded depression	
23.86	BM	0.01	drainage channel with BM veg, connected to Peytonia slough	
23.87	VP	0.36	seasonally ponded depression – vernal pool flora	
23.88	SAM	8.54	bordering Peytonia Slough tributary	
24.08	SAM	0.03	seasonally ponded depression	
24.20	BM	0.22	seasonally ponded depression, south side of Peytonia slough	
24.25	BM	1.14	seasonally ponded depression (separate segment of Feature 24.20)	
Segment 4 (MP 24.5-MP 30.7)				
24.77	WUS	0.05	channel upstream of railroad crossing	
24.78	WUS	0.07	channel downstream of railroad crossing	
24.80	SM	0.61	drainage channel connected via culvert to Feature 24.78	
24.83	SM	0.59	seasonally ponded depression	
25.81	SM	0.24	seasonally ponded depression, no VP flora	
26.02	NJW	0.09	seasonally ponded depression, marginal hydrol., no VP flora (isolated)	
26.10	WUS	0.04	WC #21 – Laurel Creek	
26.29	WUS	0.05	flood control channel – WC #21A	
26.31	SM	0.07	drainage channel connected via culvert to Feature 26.29	
26.54	SM	0.14	seasonally ponded depression, no VP flora, connected to trib. Via ditch	
26.57	NJW	0.06	seasonally ponded depression, no VP flora (isolated)	
26.61	NJW	0.09	seasonally ponded depression, no VP flora (isolated)	
26.67	NJW	0.06	seasonally ponded depression, no VP flora (isolated)	
26.80	SM	0.12	seasonally ponded depression, no VP flora, connected to trib. Via ditch	
26.97	SM	0.04	seasonally ponded depression; no VP flora; <i>Branchinecta lynchi</i>	
27.86A	WUS	0.02	seasonal drainage channel	
27.86B	WUS	0.03	seasonal drainage channel	
28.15	SM	0.66	seasonally ponded depression	
28.41	VP	0.12	seasonally ponded depression; <i>Lasthenia conjugens</i> (LACO)	
28.44	VP	0.46	seasonally ponded depression; LACO	
29.81	SM	0.48	seasonally ponded depression (historic occ. Of LACO)	
Segment 5 (MP 30.7-MP 65.1)				
31.08	NJW	0.04	seasonally ponded depression, VP flora present (isolated)	
31.34	NJW	0.04	seasonally ponded depression, VP flora present (isolated)	
31.49	NJW	0.29	seasonally ponded depression, VP flora present (isolated)	
31.54	NJW	0.49	seasonally ponded depression, VP flora present (isolated)	
31.84	VP	0.36	seasonally ponded depression	

Feature ID#	Feature Type ¹	Area (acres) ²	Description	Data Points
31.98	WUS	0.03	seasonal stream channel	
33.26	VP	0.00	seasonally ponded depression	
33.28	NJW	0.01	irrigation ditch, concrete lined- not W.U.S.	
33.77	NJW	0.03	irrigation ditch, not W.U.S	
34.73	NJW	0.13	concrete-lined channel, not W.U.S. connected to 34.75 and 35.25	
34.75	NJW	1.03	concrete-lined channel, not W.U.S. connected to 34.73 and 35.25	
35.25	NJW	0.06	concrete-lined channel, not W.U.S. connected to 34.73 and 34.75	
35.77	SM	0.04	seasonally ponded depression	
35.78	SM	0.05	seasonally ponded depression in leveled field	
35.80	SM	0.05	seasonally ponded depression in leveled field	
35.82	SM	0.04	seasonally ponded depression in leveled field	
35.84	SM	0.05	seasonally ponded depression in leveled field	
35.96	SM	0.01	seasonally ponded depression in leveled field	
35.97	WUS	0.24	irrigation ditch	
35.98	SM	0.01	seasonally ponded depression in leveled field	
35.99	SM	0.01	seasonally ponded depression in leveled field	
36.00	SM	0.01	seasonally ponded depression in leveled field	
36.01	SM	0.01	seasonally ponded depression in leveled field	
36.02	SM	0.05	seasonally ponded depression in leveled field	
36.03	SM	0.04	seasonally ponded depression in leveled field	
36.17	SM	0.95	seasonally ponded depression in leveled field	x
37.13A	SM	0.01	seasonally ponded swale/ drainage (previously verified by Corps)	
37.13B	SM	0.49	seasonally ponded swale/ drainage (previously verified by Corps)	
37.13C	SM	0.12	seasonally ponded swale/ drainage (previously verified by Corps)	x
37.35	SM	0.12	seasonally ponded (persisted late-artificially constructed)	
37.45	VP	0.02	seasonally ponded depression	
38.77	VP	0.29	seasonally ponded depression; no access	
38.79 (W)	WUS	1.52	Alamo Creek flood control channel	
38.79 (E)	WUS	0.01	Alamo Creek flood control channel downstream of Hay Road	
40.68	WUS	0.62	Ulati Creek channel – WC #26	
41.88	RS	0.25	Maine Prairie Creek – willow riparian scrub and artificial channel	
41.91	SM	0.20	seasonally ponded depression, <i>Lepidium lat.</i> And <i>Rumex crispus</i>	x
41.95	WUS	0.22	irrigation ditch, 8' wide	
41.98	SM	0.26	seasonally ponded depression, no VP flora	
42.15	SM	0.10	drainage channel	
42.16	SM	0.07	seasonally ponded depression, no VP flora	
42.31	SM	0.97	seasonally ponded depression, no VP flora	
42.46	WUS	0.06	irrigation ditch	
42.47	SM	0.11	seasonally ponded depression, no VP flora	
42.52	SM	0.07	seasonally ponded depression, no VP flora	
42.59	SM	0.90	seasonally ponded depression, no VP flora	
42.79	SM	0.54	Hass Slough channel	
42.86	SM	0.36	Hass Slough WC #28	
43.08	WUS	0.23	drainage ditch; connects to Hass Slough	
44.02	SM	0.20	seasonally ponded depression	
44.21	FM	0.03	drainage channel	
44.58	SM	0.03	seasonally ponded depression, no VP flora	
44.64	SM	0.06	drainage ditch with <i>Cyperus eragrostis</i> and <i>Xanthium strumarium</i>	
44.65	WUS	0.01	drainage ditch	
44.68	VP	0.10	seasonally ponded depression	x
44.71	VP	0.11	seasonally ponded depression	
44.76	SM	0.23	seasonally ponded channel, receives summer irrigation runoff	
44.80	VP	0.39	seasonally ponded depression	
44.97	VP	0.03	seasonally ponded depression	

Feature ID#	Feature Type ¹	Area (acres) ²	Description	Data Points
44.99	VP	0.06	seasonally ponded depression	
45.02	VP	0.00	seasonally ponded depression	
45.05	VP	0.00	seasonally ponded depression, above centerline	
45.06	VP	0.00	seasonally ponded depression, below centerline	
45.09	VP	0.01	seasonally ponded depression	
45.10	VP	0.03	seasonally ponded depression	
45.15	VP	0.01	seasonally ponded depression	
45.19	VP	0.21	seasonally ponded depression	
45.24	VP	0.13	seasonally ponded depression	
45.27	WUS	0.04	drainage ditch; connects to 45.24	
45.30	SM	0.93	seasonally ponded depression, no VP flora	
45.44	SM	0.03	seasonally ponded depression, no VP flora	
45.47	SM	0.03	seasonally ponded depression, no VP flora	
45.51	WUS	0.32	irrigation ditch	
45.59	SM	0.07	seasonally ponded depression	
45.62	SM	0.37	seasonally ponded depression	
45.63	SM	0.02	seasonally ponded depression	
45.64	WUS	0.48	irrigation ditch	
45.84	WUS	0.03	irrigation ditch	
45.85	WUS	0.01	irrigation ditch	
45.86	WUS	0.62	irrigation ditch	
45.87	SM	0.03	seasonally ponded depression, no VP flora	
46.09	SM	0.00	seasonally ponded depression, no VP flora	
46.14	SM	0.00	seasonally ponded depression, no VP flora	
46.22	SM	0.05	seasonally ponded depression, no VP flora	
46.27	SM	0.01	seasonally ponded depression, no VP flora	
46.30	SM	0.03	seasonally ponded depression, no VP flora	
46.31	WUS	0.51	irrigation channel/drainage channel?	
46.50	WUS	2.51	irrigation channel (W.U.S.) WC #31A connects to 47.31 (w=20')	
47.31	WUS	0.07	irrigation channel (W.U.S) connects to 46.50 and 47.35	
47.35	WUS	3.97	irrigation channel (W.U.S) connects to 47.31	
48.22	WUS	0.05	irrigation ditch	
48.66	WUS	0.60	irrigation channel (W.U.S.) connects to 47.35	
48.74	SM	0.00	seasonally ponded depression	
48.78	SM	0.07	seasonally ponded depression	
48.80	SM	0.00	seasonally ponded depression	
48.82	SM	0.00	seasonally ponded depression	
48.83	SM	0.00	seasonally ponded depression	
48.84	SM	0.00	seasonally ponded depression	
49.12	WUS	0.14	irrigation channel	
49.20	WUS	0.11	irrigation channel	
49.30	NJW	0.01	roadside ditch (not W.U.S)	
49.97	SM	0.32	seasonally ponded depression in cultivated field	x
50.01	SM	0.00	seasonally ponded depression	
50.03	SM	0.04	seasonally ponded depression	
50.09	WUS	0.01	irrigation ditch	
50.25	WUS	0.04	irrigation ditch	
50.86	WUS	0.01	irrigation ditch	
50.87	NJW	0.06	roadside drainage ditch (not W.U.S)	
50.94	SM	0.03	seasonally ponded depression	
51.01	SM	0.25	seasonally ponded depression	
51.19	SM	0.36	seasonally ponded depression	
51.20A	WUS	0.28	irrigation ditch with emergent vegetation WC #34	
51.20B	WUS	0.21	irrigation ditch (northern extension of 51.20A – connected via culvert)	

SFPP Concord-Sacramento Pipeline
APPENDIX 1C. WATERS OF THE U.S. IN PROJECT STUDY AREA

Feature ID#	Feature Type ¹	Area (acres) ²	Description	Data Points
51.28	WUS	0.12	irrigation ditch (excavated in upland?)	
51.48	WUS	2.31	irrigation ditch, parallels RR grade, west side, connects to 51.28	
52.76	VP	0.00	seasonally ponded depression	
52.95	SM	1.07	seasonally ponded depression, RR borrow area, no VP flora	
53.28	SM	0.12	seasonally ponded depression, receives summer irrigation runoff	
53.32	SM	0.15	seasonally ponded depression, receives summer irrigation runoff	
53.33	FM	0.11	seasonal stream channel (receives irrigation runoff)	
53.45	VP	0.00	seasonally ponded depression	
53.49	SM	1.59	seasonally ponded depression, receives summer irrigation runoff	x
53.78	SM	0.04	seasonally ponded depression	
53.80	VP	0.07	seasonally ponded depression along access (<i>Lepidurus packardii</i>)	x
54.02	FM	1.40	irrigation ditch with FM veg., receives summer irrig. Runoff (WC #37)	
56.38	SM	0.55	seasonally ponded depression (FM veg in lower portion)	x
56.49	FM	0.97	irrigation ditch	x
56.55	WUS	0.28	irrigation ditch, connects to 56.73	
56.73	WUS	0.72	irrigation ditch, connects to 56.55	
57.73	RF	1.55	Putah Creek	
58.07	NJW	0.19	irrigation canal (not W.U.S.)	
59.03	FM	0.03	seasonally ponded area within a cultivated rice field	
59.72	NJW	0.39	irrigation canal (not W.U.S.)	
60.51	NJW	0.16	irrigation canal (not W.U.S.)	
61.19	NJW	0.16	roadside drainage ditch (not W.U.S.)	
61.49	NJW	0.14	roadside drainage ditch (not W.U.S.)	
61.72	SM	0.11	seasonally ponded depression	
61.77	SM	4.58	seasonally ponded depression	
61.92	SM	0.84	seasonally ponded between frontage road & Yolo Bypass levee	
62.02	RF	0.31	riparian forest bordering Willow Slough – Yolo Bypass	
62.03	SM	144.10	seasonally ponded area – Yolo Bypass	
63.35	RS	1.39	north side of pipeline alignment – Yolo Bypass	
63.47	RF	0.93	south side of pipeline alignment – Yolo Bypass	
64.48	UPL	1.34	upland area associated with railroad embankment	
64.85	RF	0.65	riparian forest adjacent to the drain tributary - Yolo Bypass	
65.08	RF	0.69	riparian forest adjacent to the drain tributary – Yolo Bypass	
Segment 6 (MP 65.1-MP 69.9)				
65.12	WUS	2.28	open water of toe drain & tributary - Yolo Bypass	
65.20	RF	0.74	riparian forest adjacent to Toe Drain at east side of Yolo Bypass	
65.22	RF	0.42	riparian forest adjacent to West Sac. Levee (Yolo Bypass)	
65.54	NJW	0.05	toe drain adjacent to levee parallel to Wickland Extension	
65.62	SM	0.05	seasonally ponded depression behind gas station	x
65.80	WUS	0.04	Washington Lake channel	
65.81	WUS	0.50	Washington Lake channel	
66.08	FM	0.19	drainage channel from Lake Washington connected to pumping facility	
66.11	FM	0.74	artificial drainage channel at base of levee (Wickland Extension)	
68.36	WUS	0.22	Port of Sacramento ship channel (navigable)	

Source: URS, 2003.

- ¹ Feature type abbreviations:
- FM freshwater marsh
 - SM seasonal marsh
 - SAM seasonal alkali marsh
 - BM brackish marsh
 - SS seasonal seep
 - RF riparian forest
 - RS riparian scrub
 - VP vernal pool
 - WUS non-wetland water
 - NJW non-jurisdictional water

² Area estimates: Features smaller than 0.005 acres are presented as 0.00.